

REMARKS/ARGUMENTS

Reconsideration and allowance of this application are respectfully requested. Currently, claims 1-3, 4-18, 20-45 and 48 are pending in this application.

Rejections Under 35 U.S.C. §112:

Claims 1-2, 4, 7, 15, 19, 22, 32, 35, 41 and 44 were rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite. By this Amendment, Applicant submits that all of the claim limitations have a proper antecedent basis, although Applicant respectfully requests notification if the Examiner believes that this is not the case. Also, method claim 35 now depends from a prior method claim. Applicant therefore requests that the rejection under 35 U.S.C. §112, be withdrawn.

Rejection Under 35 U.S.C. §101:

Claims 1-50 were rejected under 35 U.S.C. §101 as allegedly being directed to non-statutory subject matter. Applicant traverses this rejection.

From the outset, page 4 of the Office Action makes reference to “recent Federal Circuit decisions” and specifically identifies *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008). However, Applicant notes that this Federal Circuit decision was reviewed by the U.S. Supreme Court.

Method claims 1-17 and 39-40 require “a computer system having one or more computer processors.” These method claims therefore satisfy the machine-or-transformation test set forth in *Bilski*. As noted in a published USPTO memo dated July 27, 2010, “The machine-or-transformation test remains an investigative tool and is a useful starting point for determining whether a claimed invention is a patent-eligible process under 35 U.S.C. §101.”

Claims 18-31 and 41-44 explicitly require an apparatus or a system. Accordingly, these claims are clearly directed to a machine (one of the four statutory categories of inventions

specifically enumerated by 35 U.S.C. §101). These apparatus or system claims are therefore directed to patent-eligible subject matter under 35 U.S.C. §101.

Claim 45 requires “A non-transitory storage medium carrying computer readable code representing instructions for causing one or more processors, upon execution of the code, to perform a method...” Claim 45 is therefore a *Beauregard*-type claim which is directed to an apparatus or an article of manufacture (one of the specifically enumerated statutory classes of patent eligible subject matter under 35 U.S.C. §101). See *Ex parte Bo Li* (Appeal 2008-1213; BPAI 2008; Decided: November 6, 2008)).

Accordingly, Applicant respectfully requests that the rejection under 35 U.S.C. §101 be withdrawn.

Rejection Under 35 U.S.C. §102:

Claims 1, 18 and 45 were rejected under 35 U.S.C. §102 as allegedly being anticipated by Lester. Applicant traverses this rejection.

Anticipation under 102 of the Patent Act requires that a prior art reference disclose every claim element of the claimed invention (see, e.g., *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1574 (Fed. Cir. 1986). Lester fails to disclose every claim element of the claimed invention. For example, Lester fails to disclose “defining a new point located on a midpoint of a line of sight link between two existing points,” as required by independent claim 1 and its dependents. Similar comments apply to independent claims 18 and 45.

The limitations of (now-canceled) dependent claim 4 have been incorporated into independent claim 1, and the limitations of (now-canceled) dependent claim 19 have been incorporated into independent claim 18. Applicant notes that claims 4 and 19 were not rejected over prior art. For example, neither claim 4 nor 19 (the limitations thereof now being

incorporated into claims 1 and 18, respectively) was rejected under 35 U.S.C. §102 as allegedly being anticipated by Lester.

Through this claim limitation, no collision detecting is required since all the new navigable nodes and links have been added on line of sight principles and therefore by definition already avoid all the potential obstacles.

Lester does not disclose or suggest that a new point can be defined on a midpoint of a line of sight between two existing points. Lester instead suggests that the area of the virtual world is divided into a square grid. Each square represents a node and hence in order to find the best path from a start node to an end node squares adjacent to the start node have to be examined. Squares with obstacles are ignored but the cost for going via any of the other adjacent squares, or nodes, has to be determined. When one of the squares is selected the process of examining the squares around that square is repeated. Hence, this is a complicated process that generates a higher number of nodes, requires far more computational resources, and is more complex.

Accordingly, Applicant respectfully requests that the rejection of claims 1, 18 and 45 under 35 U.S.C. §102 be withdrawn.

Rejection Under 35 U.S.C. §103:

Claim 3 was rejected under 35 U.S.C. §103 as allegedly being unpatentable over Lester in view of St. Julien et al. (hereinafter “St. Julien”). Applicant traverses this rejection. Claim 3 depends from claim 1. Applicant submits that St. Julien fails to resolve the above-described deficiencies of claim 1, from which claim 3 depends. Applicant therefore requests that the rejection under 35 U.S.C. §103 be withdrawn.

Applicant notes that none of the other claims (claims other than 1, 3, 18 and 45) were rejected under prior art. That is, none of the other pending claims were rejected under 35 U.S.C. §102 or §103.


Conclusion:

Applicant believes that this entire application is in condition for allowance and respectfully requests a notice to this effect. If the Examiner has any questions or believes that an interview would further prosecution of this application, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

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